REPORT
2004 SEPTEMBER 13

CITY OF BURNABY

TRAFFIC SAFETY COMMITTEE

HIS WORSHIP, THE MAYOR
AND COUNCILLORS

SUBJECT: GAGLARDI WAY TRAFFIC NOISE

RECOMMENDATION:

1. THAT Council forward a copy of this report to Mr. Kevin G. McKenzie, 9421 Snowberry Court, Burnaby, BC, V5A 4A6.

REPORT

The Traffic Safety Committee, at its meeting held on 2004 September 07, received and adopted the *attached* report responding to concerns of residents adjacent Gaglardi Way regarding truck traffic noise. The Committee requested that staff further review the effectiveness of sound attenuation barriers for the Forest Grove area residents.

Respectfully submitted,

Councillor Doug Evans
Chair

Councillor Nick Volkow
Vice Chair

Councillor Lee Rankin
Member

COPY: CITY MANAGER
DIRECTOR ENGINEERING
DIRECTOR PLANNING AND BUILDING

TO:	TRAFFIC SAFETY COMMITTEE	**DATE:**	2004 08 30
FROM:	ASST. DIRECTOR ENGINEERING, TRAFFIC & ENGINEERING SYSTEMS	**FILE:**	33200-06

SUBJECT: **GAGLARDI WAY TRAFFIC NOISE**

PURPOSE: To respond to concerns of residents adjacent Gaglardi Way regarding truck traffic noise.

RECOMMENDATION:

1. **THAT** a copy of this report be sent to Mr. Kevin G. McKenzie, 9421 Snowberry Court, Burnaby BC, V5A 4A6.

REPORT

1.0 INTRODUCTION

At its meeting of 2004 June 21, Council heard Mr. Kevin McKenzie who appeared on behalf of the residents of Forest Grove and Ash Grove Cr, to express concerns about increased traffic on Gaglardi Way and traffic noise, specifically the use of engine brakes by trucks travelling downhill. Most of this trucking is related to construction vehicles employed in the UniverCity development at Simon Fraser University. The speaker noted that with the addition of 9,000 - 10,000 new residents living at SFU, the increase in traffic is going to be an ongoing issue for residents of this neighbourhood.

Mr. McKenzie advised that the residents are not opposed to the development but they would like the City to construct a 5m (16 ft) high sound attenuation barrier adjacent Gaglardi Way to reduce the impact of traffic in their neighbourhood. The extent of the barrier requested is shown in Figure 1, attached. In conclusion, Mr. McKenzie noted that the increased tax revenue resulting from the UniverCity development at SFU should provide ample funding to construct the sound barrier along Gaglardi Way. Mr. McKenzie's views were supported by a 322 name petition.

Staff were asked to prepare a report on the concerns raised by the delegation.

2.0 BACKGROUND

The delegation referred to a 2002 November report of the Traffic Safety Committee responding to concerns raised by a resident representing the Strata at 9000 Ash Grove Cr. That report included the results of noise measurements taken at 9000 Ash Grove Cr. As a result of the review, additional advisory signing to restrain engine brake usage was installed along Gaglardi.

In preparation of this report, additional noise measurements were made at the residence of Mr. Simon Tooley of 8763 Ash Grove Cr (Mr. Tooley wrote to Council requesting Mr. McKenzie's appearance as a delegation).

In the prior report referred to above, it was noted that Gaglardi Way was constructed by the Provincial Government circa 1965 as an access to Simon Fraser University. In 1996, the Provincial Government changed the western linkage of Gaglardi Way from Curtis to Hastings (via Burnaby Mountain Parkway) in conjunction with the development of the Barnet Hastings HOV project. In 1999, the Provincial Government devolved most of its arterial highways in Burnaby, including Gaglardi Way, to the City. As part of the pavement rehabilitation carried out by the City, the through lanes were narrowed to provide a wider cycle lane shoulder. The speed limit was reduced to provide consistency with the posted limit on Burnaby Mountain Parkway and the reduced lane widths. Current traffic volumes (24 hour weekday) on this stretch of Gaglardi Way are in the order of 17,000 vehicles per day which is the low end of the range expected for a primary arterial. Truck traffic on some days reaches 10% of the total volume.

The Forest Grove neighbourhood was comprehensively designed in the late 1970's and the multi-family housing was largely developed in the early 1980's. The design provided for a buffer zone between the highway and residential development.

3.0 TRAFFIC NOISE

Current and previous noise readings indicate an "average" noise level of 50 dBA which would be considered an urban ambient level for development proximate to a major arterial. Typically, sound attenuation barriers would provide no benefit at these levels which indicate effective attenuation by distance from the highway. However, in both cases it would appear that there was not a significant volume of construction vehicles using Gaglardi Way during the measurement period. Further noise measurements will be scheduled.

The trucks of particular concern to residents are the heavily laden dump trucks with trailers coming from the SFU UniverCity project. The drivers use engine brakes to "slow" their descent downhill. The engine braking produces a distinct noise signature. Because the noise is occasional, it can be particularly annoying.

4.0 DISCUSSION

The delegation's submission included a number of recommendations discussed below.

4.1 That the City, by bylaw, prohibit the use of engine brakes.

As the delegation noted adjacent jurisdictions have such a bylaw. For example, the City of Vancouver prohibits the use of engine brakes except in emergencies. Staff are currently working toward a complete revision of the commercial vehicle component of the Street & Traffic Bylaw. The City is also participating in a regional initiative on commercial vehicle enforcement. The goal here is to achieve a common regional approach to the regulation of truck traffic. The engine brake prohibition will be recommended in that context.

4.2 That the City restrict the operating hours of trucks on Gaglardi Way to weekdays from 8:00am - 4:00pm with a total ban on weekends.

Such a restrictive prohibition would have a significant negative impact on goods movement, given the City's relatively sparse truck route network. In any case, the legislation establishing the Greater Vancouver Transportation Authority precludes restriction of the truck route network without TransLink board approval.

4.3a The accumulation of further data on truck traffic, noise, etc. along Gaglardi Way.

The collection of large amounts of data requires a significant additional resource commitment. For example, the collection of classification data (speeds, trucks as well as volumes) with conventional road tube counting equipment is problematic. The City, over time, is establishing permanent count stations using inductance loops cut into the pavement. We will schedule an additional noise measurement at Snowberry Court where the delegation lives.

4.3b Additional signing.

There is a redundancy of signing along Gaglardi Way which apparently has not resulted in resolving the engine brake noise concern.

4.3c Additional enforcement.

The ability of police to sustain effective enforcement of existing regulations is constrained.

4.4 Liaison with SFU (UniverCity).

The City maintains a continuing dialogue with SFU and UniverCity development staff who have been forthcoming in dealing with specific issues related to construction traffic. The inclusion of residents in some of this dialogue would be helpful and staff will broach this with the UniverCity team.

4.5 The City use its powers to enforce noise and other bylaws limiting construction hours relative to development at SFU.

This is being done.

4.6 Impact of Bill 75 (the Significant Projects Streamlining Act) on the neighbourhood.

No impact is anticipated.

4.7 Noise barrier.

It is the City's policy that noise attenuation measures are incorporated into new road projects adjacent residential areas. The construction of Gaglardi Way predates adjacent residential development by some two decades. The residential development is by design appropriately buffered from the road. The distance separation provides effective attenuation except for the annoyance of engine brakes. Much of the annoyance is related more to the characteristic of the sound rather than the measurable volume. Accordingly, the effectiveness of a noise barrier for reducing the episodic signature of engine brakes is questionable.

5.0 CONCLUSION

The residents' concern with the annoyance of engine brake usage is understandable. It is a problem that arises elsewhere in the City. The inclusion of a prohibition on the use of engine brakes into the commercial vehicle regulation division of the Street & Traffic Bylaw is anticipated.

Staff will continue its liaison with SFU UniverCity development team over the duration of the project and will seek to include resident representation on a routine as well as an as needed basis.

The provision of a noise barrier as suggested by the residents would be very expensive given the height and length of the barrier as well as the terrain on which it would have to be provided. Further, it would be of questionable effectiveness. The existing separation between the road and residential development effectively attenuates road traffic noise. The annoyance resulting from the episodic use of engine brakes would not necessarily be attenuated by a barrier.

It is recommended that a copy of this report be sent to the delegation.

P. Liivamagi, P. Eng.
ASST. DIRECTOR ENGINEERING,
TRAFFIC & ENG. SYSTEMS

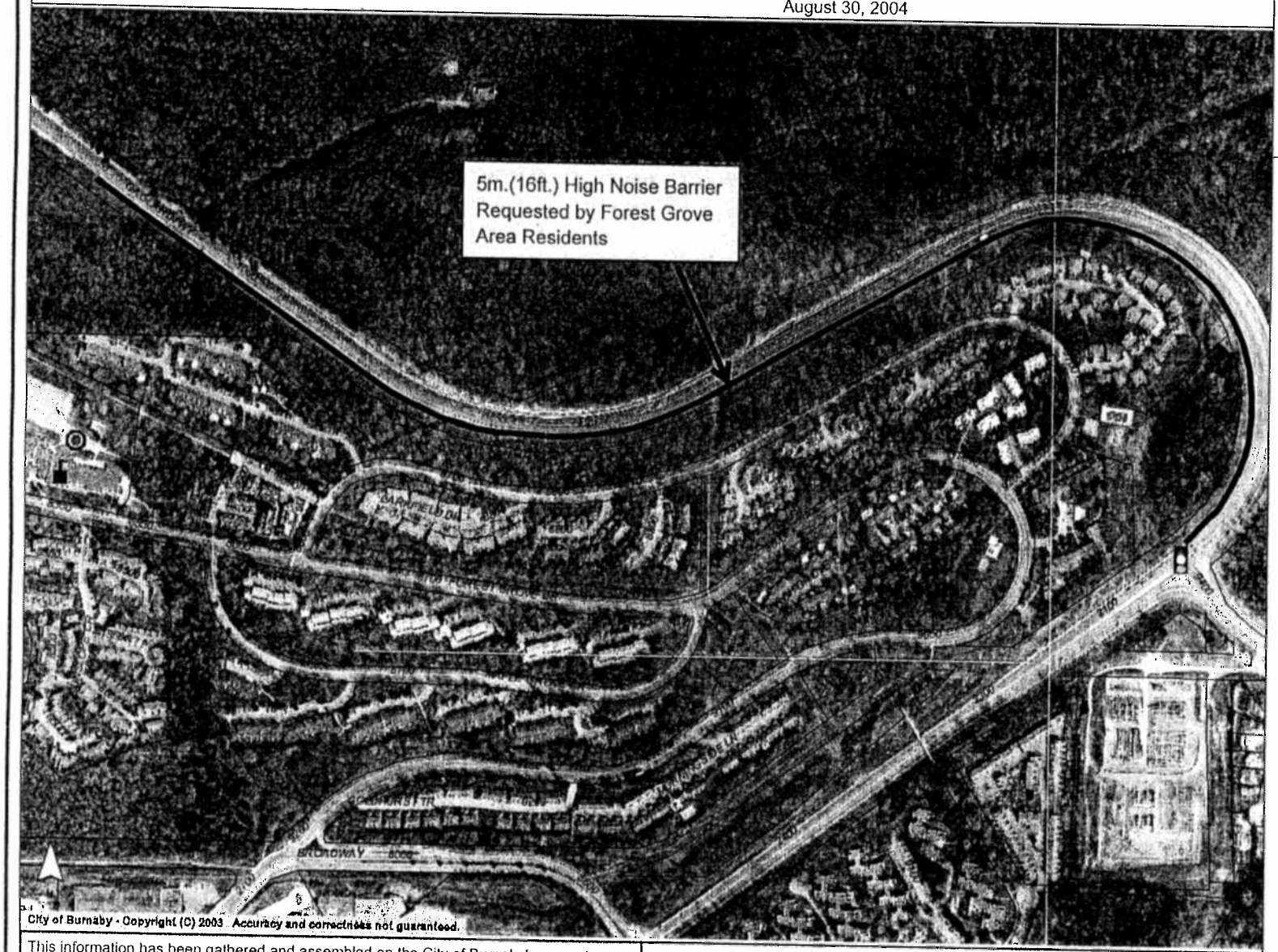
PL:jb
Attach.

cc: City Manager
Director Planning

City of Burnaby

Gaglardi Way and the Forest Grove Neighbourhood

August 30, 2004



- Strata Units
- Places
  - Golf
  - Police
  - Fire
  - Utility
  - Cemetery
  - School
  - Civic
  - Library
  - Hospital
  - Mall
  - Parks and Rec
- Skytrain Stations
- Skytrain Lines
- Lot
- Street Intersections
- Traffic Signal
- Speed Humps
- Speed Humps
- Hundred Blocks
- Roads
  - Local
  - Collector
  - Arterial
  - Freeway
- Hydrology
- Colour 2002
- Boundary

This information has been gathered and assembled on the City of Burnaby's computer systems. Data provided herein is derived from a number of sources with varying levels of accuracy. The City of Burnaby disclaims all responsibility for the accuracy or completeness of information contained herein.

N

Map Scale
1 : 7000